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## RESPONSES TO COMMENTS ON THE DRAFT 2010 SFER – VOLUME I, CHAPTER 7A

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### **Level of Panel Review: Accountability (primary)**

**Reviewers: N. Armstrong (AA), R. Ward (A)**

**Comment #1:** *Chapter 7A is well written and provides considerable insight into the overall restoration strategy in South Florida. Its update focus, however, appears to be on the Comprehensive Everglades Restoration Plan (CERP) projects despite the broader purpose noted in Lines 88-89 (“...progress of environmental ... across the Northern and Southern Everglades regions,” i.e., all of South Florida). Of particular note is the discussion of the River of Grass land acquisition toward the end of the chapter. Chapter 7A hints at the major impact this action may have on the Everglades restoration plans and projects in the future.*

**Response #1:** We appreciate your comments. The chapter is not intended to focus on CERP, although the CERP includes the largest number of projects of the District’s restoration programs or initiatives. In addition to CERP projects, Chapter 7A describes the status and progress of the Kissimmee River Restoration, Northern Everglades and Estuaries Program projects, Lake Okeechobee initiatives such as Lakeside Ranch and Lake Point, Herbert Hoover Dike repairs, changes to the Lake Okeechobee Regulation schedule, Critical Restoration Projects (predecessors to CERP), and non-CERP projects in the Caloosahatchee Basin.

With regard to the *River of Grass*, the acquisition has the potential to provide multiple benefits. However, we deliberately limited speculation on restoration options that might be available after the lands are acquired. When the chapter was written, Phase I planning had just been completed and provided a suite of possible avenues for projects. As mentioned in the chapter, Phase II planning will develop some of these project options more fully (also see Response #6). At this time, the acquisition remains a work in progress, and we knew a significant planning effort will occur to identify the size and location of project storage or treatment features. Moreover, we knew that potential existed for land swaps and sales which further complicate our ability to predict specific projects that will benefit Everglades restoration. With that said, the acquisition will provide significant opportunities, beyond CERP, to construct needed water storage and stormwater treatment areas needed for the south Florida system.

**Comment #2:** *The chapter provides a project by project summary of the goals of the projects as well as the progress being made to complete those projects. Progress in the chapter appears to be defined in terms of construction status and contract completion rather than the success resulting from the project. “Research and water quality monitoring” are discussed several times (Lines 194-201 and 612-632), but no results of the monitoring are provided to account for the goals listed in Lines 200-201 – namely meeting water storage and quality goals which, in turn, are expected to curtail habitat loss and allow the recovery of more desirable plant, fish, and wildlife communities. Are the monitoring results, presented in other chapters, intended to meet the needs to account for CERP project success? If so, it would be helpful to note where monitoring results, that document CERP project goal attainment, can be viewed.*

**Response #2:** True, the chapter focuses on construction status and contract completion rather than the success resulting from projects. We have completed few restoration projects other than

the Stormwater Treatment Areas and the Critical Restoration Projects. The CERP planning, modeling, and design requirements made a complex federal NEPA process more complicated and time consuming. The challenges associated with completing Project Implementation Reports, obtaining congressional authorizations, and obtaining permits for these large restoration projects have been formidable. We are, however, at a stage where key CERP and non-CERP projects are authorized by Congress, funding is now available, and the Corps of Engineers and the South Florida Water Management District are poised to begin construction on the Modified Water Deliveries to the Everglades, the C-44 Reservoir, Picayune Strand, Site 1 Impoundment, C-111 Spreader Canal Western Features, and Biscayne Bay Coastal Wetlands projects.

**Comment #3:** *As noted above, water quality monitoring is mentioned several times in Chapter 7A, but there is no reference to the District's efforts to re-engineer its monitoring programs. Why?*

**Response #3:** The District, in collaboration with its partners, continues to assess reengineering of water quality monitoring networks across south Florida while cost-effectively providing necessary information on the status of the ecosystem and performance of regional restoration components. Over the past two years, there has been much progress made in coordinated efforts in reengineering water quality monitoring in a few selected locations, such as the completed pilot study at Water Conservation Area 2. With the data collected and lessons learned to date, efforts are under way to broaden and apply this valuable information to other regional areas such as the Everglades Stormwater Treatment Areas.

Looking ahead, our agency recognizes that there are notable challenges as Everglades restoration projects are planned and implemented, but envisions opportunities to reconstruct water quality monitoring into a cost-effective and sustainable system across the region as restoration efforts continue to unfold. It is also anticipated that data used for reengineering efforts may be considered and integrated into other Everglades restoration monitoring and assessment activities, as appropriate. It is hoped that further details on reengineering efforts will be posted on the District's web site in the upcoming year.

**Comment #4:** *The purpose of the 'CERP Aquifer Storage and Recovery Pilot Projects' (Line 257) and further discussed on page 7A-9, does not present an environmental reason for the need to "implement this technology" (Line 260). The CERP Aquifer Storage and Recovery Regional Study (Line 281) does provide environmental reasons for projects. Could these subtitles be reversed in order of presentation? Is this one of the areas where the River of Grass land acquisition may have a major impact?*

**Response #4:** Reversing the order of presentation (CERP Aquifer Storage and Recovery Regional Study then the CERP Aquifer Storage and Recovery Pilot Projects) is a good suggestion. This will be implemented in the final report.

Aquifer storage and recovery has been identified in CERP to address long-term storage of water that would otherwise not be available with surface storage during long dry periods because of evaporation. We will add a statement to that effect in the report. The *River of Grass* land acquisition may have an impact on the volume of storage required and the land available for construction, but further assessments are required. Those assessments will be to determine whether impacts exist and whether those impacts are on short or long term storage and on the proposed volumes anticipated for CERP Aquifer Storage and Recovery.

***Comment #5:*** Lines 614-615 note that “Research and monitoring in the Caloosahatchee and St. Lucie estuaries have been ongoing for more than 40 years ... yet solutions to water quantity and water quality problems are hampered by gaps and uncertainties in the understanding of the two estuarine systems.” This is a remarkable statement that begs for an explanation. What is the basis for this statement? Has there been an assessment of long-term trends contained in this data record? If so, could it be cited in the report with a brief summary of major conclusions?

**Response #5:** This statement was based on the assessments conducted under Research and Water Quality Monitoring Plans published in 2008 (Appendix E, included both in Caloosahatchee and St. Lucie River Watershed Protection Plan). The Research and Water Quality Monitoring Plans included trend analyses conducted in both watersheds, however, data gaps still exist. The objective of the Research and Water Quality monitoring plan aims to fill these data gaps and uncertainties. We actually have a good understanding of the basic ecological models for the estuaries and of how to make improvements in the quality, quantity, timing and distribution of flows of water to these water bodies.

***Comment #6:*** The halt in work on CERP EAA storage reservoirs – Phase I Project – (Lines 804-805) appears to be an early impact of the emerging potential of the River of Grass land acquisition. Are there other projects where events are already pointing toward changes in current projects – changes that can be discussed in the 2010 SFER report? Or will further impacts have to wait until the 2011 SFER?

**Response #6:** The Phase I EAA storage reservoir was suspended because of a lawsuit challenging the issuance of the Corps of Engineers construction permit. As the *River of Grass* acquisition took shape, there was recognition that other options might be considered for the site other than deep storage. One change to current projects would be the expansion of stormwater treatment capacity in the EAA as a result of the *River of Grass* acquisition.

Phase II of the *River of Grass* planning effort will begin later this year and is slated to last up to two years. During that period much of the planning for the lands to be acquired will be developed and the potential changes that may occur to current projects will be identified. All progress made during the ongoing *River of Grass* Planning effort will be discussed in the 2011 SFER.

***Comment #7:*** In the discussion of MAP 2008, there is reference to lessons learned, but no mention is made of creating a consistent, long-term data set from which restoration efforts in the Everglades can be held accountable. Was this not part of the discussion in development of MAP Part 2?

**Response #7:** RECOVER is creating a consistent, long-term data set. RECOVER provides more information in Chapter 7B of the SFER.

***Comment #8:*** Has there been any connection between the MAP efforts and the District’s monitoring re-engineering efforts?

**Response #8:** The MAP is a living document that is reviewed and revised on a regular basis in response to perceived changes in ecological monitoring needs as indicated by the assessment activities associated with the development of the System Status Report and other CERP related changes. As discussed in Chapter 7B, the most recent revision was done during Fiscal Year 2009 and is expected to be finalized in Fiscal Year 2010. Each time a MAP monitoring contract is due for renewal, it is carefully reviewed by the Assessment Team chairs and module leads to ensure that its scope continues to meet the needs of the MAP. It is expected that updates on this information will be presented in future SFERs.

**Level of Panel Review: Integrative (secondary)**

**Comment #1:** *Given that there are a number of major initiatives working to restore the Everglades, at the same time, Chapter 7A attempts to clarify how the initiatives' various projects interface. The listing of initiatives and partnerships presented in Lines 99-106 could be more informative if the chapters discussing each initiative were also listed. For example, CERP, the first listing, is discussed in Chapter 7A. State of Florida expedited projects, apparently, is Chapter 7B. Kissimmee River Restoration is Chapter 11. Everglades Forever Act is Chapter 3 and Long-Term Plan is Chapter 8. Lake Okeechobee in Chapter 10 and Coastal Estuaries in Chapter 12. Is this, in general, how the partnerships listed are distributed among the SFER chapters?*

**Response #1:** We will include the chapter references in the final report to assist readers.

**Comment #2:** *Table 8-1, in Chapter 8, contains a list of RECOVER projects citing chapters where more detail is provided. CERP projects, likewise, are further discussed in various chapters. Would a listing of where such discussions occur, for the 50 CERP projects (Line 1194), be possible as a way to assist readers in understanding the integration of CERP projects with other restoration initiatives?*

**Response #2:** The list in Chapter 8 is well done and useful. Chapter 7A: Everglades Restoration Update and Appendix 7A-1: CERP Annual (470) Report are the original and ultimate sources for CERP projects. Prior to the 2009 SFER, Chapter 7A provided (and was titled) the Comprehensive Everglades Restoration Plan (CERP) Update. On the recommendation of the Peer Review Panel, this chapter was expanded to provide a more integrative view of all of the Everglades restoration programs. We will include references to other sources of information whenever possible in the chapter and appendix.

**Comment #3:** *Observation: Reserve water (Line 699) is like a 'water right' in the West – the right to use a set amount of water at a set time in priority relative to other users' rights.*

**Response #3:** Correct. In the case of CERP, however, the water is reserved for the benefit of fish and wildlife. In February 2009, the District adopted a rule to reserve water for the environment from the restoration of the Picayune Strand. With a water reservation in place, volumes and timing of water at specific locations can be protected for the natural system ahead of consumptive uses, such as new development.

**Comment #4:** *The Everglades Construction Project update beginning on Line 912 is also updated in Chapter 8. Is the summary here to show connections with the CERP? Also, it is noted in Lines 915-917 that substantial progress toward reducing TP levels discharged to the EPA has been made. A reference is needed to back up this conclusion.*

**Response #4:** Yes, the summary was included to show the connection between the Long-Term Plan projects and other District Everglades restoration efforts including CERP. We will include a reference to Chapter 8, where results are summarized for TP removal. Chapter 8 presents an update on the Implementation of the Long-Term Plan for Achieving Water Quality Goals in the Everglades Protection Area, as required by Everglades Forever Act. In addition to being required by state and federal law, achieving Everglades water quality standards by implementing the Long-Term Plan is one of the District's strategic priorities.

The updates for many of the Long-Term Plan projects appear in other chapters of the SFER. Chapter 4 discusses the Long-Term Plan projects that cover non-Everglades Construction Project (ECP) basins and source controls. Long-Term Plan projects relating to the ECP Stormwater Treatment Areas (STAs) are covered in Chapter 5. The Long-Term Plan projects being implemented as part of the District's Everglades expedited projects effort are presented in Chapter 7A. The financial reporting related to the implementation of the Long-Term Plan is covered in Chapter 13 of this volume. Table 8-1 provides a good reference to the specific chapters of the SFER where each Long-Term Plan project update appears.

***Comment #5:*** RECOVER is discussed beginning on Line 1145, but there is no reference to Chapter 7B. Why?

**Response #5:** Chapter 7A will be updated to include a reference to Chapter 7B. RECOVER program activities during 2009 include development of the next System Status Report and an interactive web page on which to publish the report. The CERP Monitoring and Assessment Plan (MAP) is being updated. New tools are being developed to assist with plan evaluation and assessment of the status of the system. These tools include expansion of an oyster habitat suitability index to additional estuaries; a high resolution hydrology model coupled with wading bird, alligator, and fish tools; a tool to assess the ecological response of estuarine indicators to salinity and other stressors; and a water budget accounting system.

RECOVER continues to develop new tools to assist with managing, accessing, and utilizing data collected through the MAP program. An adaptive management guidance document for project and system-wide use is under development. As part of Adaptive Management, RECOVER also is updating the modeling conditions for certain projects and compiling new scientific knowledge gained since CERP was authorized. In addition, RECOVER continues to provide support to CERP projects.